Amendments to the Specification:

Please replace the paragraph beginning at page 11, line 14 with the following amended paragraph and subsequent paragraphs:

Molecular markers include molecules in which the molecular weight of the molecule is artificially enhanced. For example, any element or compound which can be produced with stable isotopes not generally found in nature is suitable for the molecular marker. The molecular marker is labeled with a non-radioactive atom in at least one specific site in the molecule. Possibly used are those compounds deuterated or rendered isotopic by carbon-13 or fluorine-19. Also used are nitrogen-15, oxygen-17 and oxygen-18 isotopic materials. Thus, molecular markers may be referred to as molecular mass-differentiated markers. The molecular marker should have good thermal stability ~~and little light absorption in the visible region; that is they should impart little or no color to the liquid to which the molecular marker is copolymerized or admixed with. Also, they should have strong absorption of near infrared light (high molar extinction coefficients, e.g., >20,000) and have strong fluorescence in the near infrared over the wavelengths of about 670-2500 nm. To produce essentially "invisible" tags the near infrared fluorescent compounds must absorb little if any light having wavelengths in the 400-670 nm range; however, since the compounds are present in extremely low concentrations, a small amount of absorption may be tolerated without imparting significant color.~~

The molecular marker is more commonly a non-radioactive isotope of such organic solvents as acetone, acetonitrile, benzene, bromobenzene, chlorobenzene, chloroform, cyclohexane, dichlorobenzene, trichloroethylene, diethylether, diglyme, dimethylsulfoxide, dioxane, ethanol, methanol, methylene chloride, nitrobenzene, octane, pyridine, tetrachloroethane, tetrahydrofuran, tetrametholsilane, toluene, trifluoroacetic acid, trifluoroethyl alcohol, xylene, ammonium bromide, or acetyl chloride.

One particular class of organic compounds are those which have been deuterated, i.e., wherein the hydrogen atoms covalently bound to carbon atoms are replaced with deuterium atoms. Deuterium is a non-radioactive isotope of hydrogen which is often called heavy hydrogen. Deuteration of organic compounds can be accomplished by methods known in the art such as those disclosed in U.S. Pat Nos. 3,746,634 and 3,876,521 wherein deuteration is effected with deuterium gas in the presence of a Group VII or VIII metal catalyst at a temperature between about 100 and about 300 degrees C. The non-radioactive isotopes for use in this invention may further be prepared in accordance with the prior art teachings of such materials used in the medical arts. The non-radioactive chemical substance may have the heavy atom in any position of the molecule. Likewise, one or more of the reactive sites of a molecule may contain a heavy atom. For example, the number of permutations possible with n-octane is in the thousands since one or all of the hydrogen atoms of the molecule may be substituted with deuterium as set forth below:

$CH_2DCH_2CH_2CH_2CH_2CH_2CH_2CH_3$;

$CH_3CHDCH_2CH_2CH_2CH_2CH_2CH_3$;

$CH_2DCHDCH_2CH_2CH_2CH_2CH_2CH_3$;

$CH_2DCH_2CH_2CH_2CH_2CH_2CH_2CH_2D$;

$CH_2DCHDCHDCH_2CH_2CH_2CH_2CH_3$;

$CH_3DCHDCHDCH_2CH_2CH_2CH_2CH_2D$.

The number of uniquely identifiable combinations of deuterated n-octanes naturally decreases the chance that more than one liquid will contain the same non-radioactive isotope.

Please delete the paragraphs beginning on: page 13, line 16; page 13, line 22; and page 14, line 5.